

IN THE CLAIMS:

1. (Currently Amended) An image projector comprising:
 - a light source having an elliptical reflector;
 - a color filter that transmits a predetermined beam of light of a predetermined wavelength from beams of light focused from the light source;
 - a reflective plate that reflects the predetermined beam of light transmitted through the color filter;
 - a rod lens that converges the predetermined beam of light from the reflective plate to make a distribution of the predetermined beam of light uniform;
 - a first illumination lens part that diverges the predetermined beam of light of a uniform distribution from the rod lens, and focuses the predetermined beam of light onto a plurality of focusing points;
 - a polarization beam sprite array that polarizes the predetermined beam of light from the first illumination lens in a predetermined direction;
 - a second illumination lens part that focuses the polarized beam of light from the polarization beam sprite array;
 - a polarization prism having a polarization split plane for transmitting or reflecting the focused beam of light;
 - a reflection type display for producing a picture beam according to a video signal by using a reflected beam of light; and
 - a projection lens for enlarging and projecting the picture beam.
- ~~— a lamp for emitting beams of lights, wherein the lamp includes an elliptical reflector that focuses beams of light onto a surface in front of the lamp;~~
- ~~— a color wheel for splitting particular color beams in succession from the beams of lights;~~
- ~~— a rod lens for making distribution of the color beams from the color wheel~~

uniform, wherein the rod lens has an optical surface with an area greater than an optical output surface;

~~— a polarized beam converter for converting the color beams into beams of a particular pole;~~

~~— an optical system for focusing the color beams converted into beams of a particular pole;~~

~~— a reflection type display for producing a picture beam of a video signal according to the video signal by using the color beams from the optical system;~~

~~— a polarization beam-split prism between the optical system and the display for reflecting the color beams from the optical system and transmitting the picture beams from the display; and;~~

~~— a projection lens for enlarging, and projecting the picture beams.~~

2. (Cancelled).

3. (Currently Amended) An image projector as claimed in claim 1, wherein the color wheel filter is a cylindrical color wheel having a plurality of color filters integrated into a cylinder form.

4. (Cancelled).

5. (Currently Amended) An image projector as claimed in claim 1, wherein the color wheel filter is a disk type color wheel having a plurality of color filters integrated into a disk form.

6. (Previously Amended) An image projector as claimed in claim 1, wherein the rod lens is tapered from an optical input surface to an optical output surface.

7. (Cancelled).

8. (Currently Amended) An image projector as claimed in claim 7_1, wherein the polarization beam sprite array receives beams inclusive of a P wave and an S wave, and transmitting the S wave and converting the P wave into the S wave and transmitting the converted S wave.

9. (Currently Amended) An image projector as claimed in claim 7_1, wherein the polarization beam sprite array receives beams inclusive of a P wave and an S wave, and transmitting the P wave and converting the S wave into a P wave and transmitting the converted P wave.

10. (Currently Amended) An image projector as claimed in claim 9, further comprising a half wavelength plate between the polarization beam sprite array and the polarization beam sprite prism for converting the S wave into the P wave, or vice versa.

11. (Cancelled).

12. (Currently Amended) An image projector as claimed in claim 1, further comprising a polarizing plate between the ~~optical system~~ second illumination lens part and the polarization beam sprite prism for removing noise beams.

13. (Previously Amended) An image projector as claimed in claim 1, further comprising:

- a $\frac{1}{4}$ wavelength plate between the polarization beam sprite prism and the display;
- a polarizing plate between the polarization beam sprite prism and $\frac{1}{4}$ wavelength plate; and
- a $\frac{1}{2}$ wavelength plate between the polarizing plate and the $\frac{1}{4}$ wavelength plate.

14. (Cancelled).

15. (Currently Amended) An image projector comprising:

- a light source having an elliptical reflector;
- a color filter that transmits a particular beam of light from beams of light focused from the light source;
- a reflective plate that reflects the particular beam of light of a wavelength transmitted through the color filter;
- a rod lens that converges the beam of light from the reflective plate to make a distribution of beam uniform;
- a first illumination lens part that diverges the beam of light of a uniform distribution from the rod lens, and focuses the beam of light onto a plurality of focusing points;
- a polarization beam sprite array that polarizes the beam of light from the first illumination lens in particular direction;
- a transmission-type display that produces a picture beam according to a video signal by using a polarization split beam of light; and
- a projection lens for enlarging, and projecting the picture beam.
- ~~a lamp for emitting beams of lights, wherein the lamp includes an elliptical reflector that focuses on beams of light onto a surface in front of the lamp;~~
- ~~— a color wheel for splitting particular color beams in succession from the beams of~~

lights;

~~—— a rod lens for making distribution of the color beams from the color wheel uniform, wherein the rod lens has an optical input surface with an area greater than an optical output surface;~~

~~—— a polarized beam converter for converting the color beams into beams of a particular pole;~~

~~—— an optical system for focusing the color beams converted into beams of a particular pole;~~

~~—— a transmission-type display for producing a picture beam of a video signal according to the video signal by using the color beams from the optical system; and,~~

~~—— a projection lens for enlarging, and projecting the picture beams.~~

16. (Cancelled).

17. (Previously Amended) An image projector as claimed in claim 15, wherein the display includes polarizing plates fitted in front and rear of the display.

18. (Original) An image projector as claimed in claim 15, further comprising a mirror between the display and the projection lens for directing the picture beams supplied from the display to the projection lens.

19. (Currently Amended) An image projector as claimed in claim 15, wherein the color wheel filter is a cylindrical color wheel having a plurality of color filters integrated into a cylinder form.

20. (Canceled).

21. (Currently Amended) An image projector as claimed in claim 15, wherein the color ~~wheel~~ filter is a disk type color wheel having a plurality of color filters integrated into a disk form.

22. (Cancelled).

23. (Canceled).

24. (Previously Added) A projector, comprising:
a light source;
a color filter that filters light from the light source;
a tapered rod lens which receives light from the color filter;
a polarizing array, wherein the tapered rod lens is between the color filter and the polarizing array;
a prism, wherein the polarizing array is between the tapered rod lens and the prism; and
a projection lens, wherein the prism is between the polarizing array and the projection lens.

25. (Previously Added) The projector of claim 24, wherein the tapered rod lens comprises an optical output surface and an optical input surface, wherein the optical output surface has a smaller area than the optical input surface.

26. (Previously Added) The projector of claim 25, wherein the rod lens causes light from the filter to create a plurality of focusing dots on the polarizing array.

27. (Previously Added) The projector of claim 24, wherein the polarization array comprises:

polarization beam split planes;

polarization beam reflection plates; and

half wavelength plates attached to an optical output surface of the polarization beam split planes.